REBUTTAL TESTIMONY

OF

ENRIQUE BACALAO

South Beloit Water, Gas, and Electric Company

Docket Nos. 03-0676 and 03-0677
(Consolidated)

April 8, 2004

Q. Please state your name and business address.

A. My name is Enrique Bacalao. My business address is 4902 North Biltmore Lane, P. O. Box 77007, Madison, WI 53707-1007.

Q. Are you the same Enrique Bacalao that provided Direct Testimony in this consolidated docket?

A. Yes, I provided Direct Testimony in the consolidated docket to address issues relating to the cost of equity capital and what would constitute a fair return on common equity for South Beloit Water, Gas and Electric Company ("SBWGE") gas and water utility services.

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my pre-filed Rebuttal Testimony is to discuss several issues raised by Janis Freetly on behalf of Commission Staff in her Direct Testimony.

Q. Do you agree with Ms. Freetly's recommendations on the cost of capital?

A. No, I do not. Ms. Freetly limits herself to two methods of calculating the cost of equity, without analyzing the strengths and weaknesses of those particular methods or considering any alternative methods. The point in examining the alternative methods is to obtain alternative insights and confirmations; to recognize the limitations specific to each; and to apply judgment in interpreting the results from each one. Ms. Freetly chose to apply the single-stage discounted cash flow ("DCF") model and the capital asset pricing single-factor risk premium ("CAPM") model without expressly noting their respective limitations or identifying the characteristics of the alternative variations of these two particular models.

Q. Which limitations should she have noted?

A. The single stage DCF model requires a number of assumptions to be made, not all of which may be reasonable. They include, among many, the unreasonable assumptions that an analyst's projected growth in earnings is identical to that analyst's projected growth in dividends; that dividends grow constantly and predictably in perpetuity; that analysts' projected growth rates apply in perpetuity, when in fact they rarely extend beyond five years; and that dividends constitute the only distribution made to shareowners. The CAPM model is predicated on beta values that are calculated on historical correlations, violating the principle she espouses that "historical risk premiums are not reliable proxies for current or future risk premiums." [1] Her use of two beta methodologies [2] and adjustments [3] fail to alter that basic fact.

Q. What impact does this have on Ms. Freetly's analysis and recommendations?

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[1] Direct Testimony of Janis Freetly, pp. 41, lines 686-687
[2] *Ibid.*, pp. 27, lines 454-456
[3] *Ibid.*, pp. 28-29, lines 463-469

A. Ms. Freetly's estimated cost of common equity is skewed downwards as a result of her limited analysis and unreasonable assumptions. Leaving aside other factors, including her selection criteria in forming her sample groups as discussed below, one can attribute most of the gap between her estimated cost of common equity capital and my estimated cost of common equity capital to the scope of her analysis. Her DCF cost estimates range from 8.98% (utilities) to 9.40% (gas) and 9.78% (water), compared to my DCF cost estimate of 12.32%. Her CAPM cost estimates range from 9.40% (water) to 10.32% (gas) and 10.40% (utilities), compared to my CAPM cost estimate range from 12.27% to 12.65%. Had she performed the additional analysis as I did, she would have obtained insights into a number of questions, including the ranking reversal of her estimates, *i.e.*, why does water rank highest in one model and lowest in the other, while utilities flip from lowest to highest in those same models?

Q. What could have been expected if Ms. Freetly had broadened her analysis to include other models and assumptions?

A. I think Ms. Freetly would have been able to analyze a more complete universe of calculations and a larger sample of proxy companies that would have been more reflective of actual market conditions and dynamics. She would also have been able to test her estimates against historical norms to calibrate how atypical her estimates might be. More realistic assumptions would have been helpful in reaching more accurate estimates. Testing variations of the models and assumptions would have given her insights into the sensitivity or robustness of her estimates. Using more than two models would also have allowed her to compensate their different weaknesses and offset statistical bias.

Q. How would Ms. Freetly's rate of return recommendation have been affected by a fuller analysis?

A. Had Ms. Freetly applied a broader and more thorough analysis, I believe she would have been able to make a more fair and reasonable recommendation on the allowed rate of return. As correctly stated by Ms. Freetly in her Testimony [4], what we are seeking is a properly balanced authorized rate of return. If the authorized rate of return is less than a reasonable cost of capital, WPL might be unable to raise capital at a reasonable cost, and ultimately be unable to raise sufficient capital to meet the demands for service. I can confirm that the equity market is sensitive to the fairness and accuracy of the authorized rate of return in the Company's rate cases. Ms. Freetly's analysis understates the real cost of common equity capital by not accurately reflecting market conditions, which is why the Commission should adopt my analysis.

[4] Direct Testimony of Janis Freetly, pp. 2-3, lines 25-35

Q. Were Ms. Freetly's references to credit ratings in determining an appropriate capital structure accurate?

A. No. It does not appear to me that Ms. Freetly incorporated off-balance sheet adjustments into her analysis. While her comparison cited on page 7, lines 113 to 117, appears to incorporate off-balance-sheet adjustments, her analysis [5] does not refer to any of these adjustments. The issue is whether or not her assessment that "the common equity ratio, while on the high end, is not excessive in comparison to the mean common equity ratio for S&P AA- rated gas distribution utilities and S&P A+ rated water utilities" [6] is reasonably based. S&P adjusts a company's debt obligations to attribute some proportion of its off-balance-sheet obligations (including such items as purchased power contracts) to that company's total debt obligations for the purpose of calculating credit ratios, including the total debt to total capital ratio. The S&P benchmark ratios cited in Table 1 are based on adjusted numbers, but the ratios cited by Ms. Freetly in her Schedule 4.10 do not specify whether or not they have been adjusted for off-balance-sheet items. If there is a discrepancy, it undermines the comparability of her sample group to WPL.

Q. Is Ms. Freetly correct in asserting that it is appropriate to compare capital ratios to AA- rated utilities?

[5] Direct Testimony of Janis Freetly, pp. 7-9, lines 113-136

A. No. Ms. Freetly testifies that "it would be inappropriate to base SBWGE's allowed rate of return on the basis of WPL's A- credit rating since that credit rating is due to its affiliation with unregulated or non-utility companies." [7] Ms. Freetly offers no evidence that WPL would have remained a AA- rated utility company if it had not been affiliated to its parent holding company, Alliant Energy Corporation. In fact, in view of the general downgradings of utility companies by both Standard & Poor's and Moody's, it is likely that WPL would have been downgraded as a stand-alone utility company in line with the rest of the industry. Further, there is the troublesome implication that if, as a result of a future upgrading of its parent company, WPL in turn were to be upgraded above a AA- credit rating, the Commission would be prohibited from reflecting the decrease in risk associated with its affiliation to its parent company, presumably implying that WPL's rating should be fixed at AA- in perpetuity, with its parent company being rewarded or penalized depending on its variance around that particular credit rating.

Q. In what other manner is Ms. Freetly's analysis flawed?

A. Ms. Freetly applies an asymmetrical criterion in selecting her sample group, in that the companies had to have an S&P business profile score

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[6] Direct Testimony of Janis Freetly, pp. 8, lines 127-129
[7] Direct Testimony of Janis Freetly, pp. 10, lines 158-160

equal to or better than WPL's (its score is 4) [8], which would skew her sample group. The net effect of arbitrarily attributing a AA- credit rating to WPL and of creating a proxy group of companies with an intrinsically lower risk profile than WPL's is to bias Ms. Freetly's cost of common equity calculations downwards and lead her to recommend an unreasonably low rate of return.

Q. **Do you have any other comments regarding her sample group?**

A. Her sample is very constrained, being limited to the particular sector, which presumes gas companies compete only with other gas companies for available capital, and water companies compete with other water companies for a separate pool of available capital. Credit ratings reflect the risk of debt instruments, not equity instruments, so its use as a selection criterion is inappropriate. The final result is a sample of nine gas companies and seven water companies that could not be considered a comparable peer group to WPL; even Ms. Freetly's own table (Schedule 4.10) highlights the differences. The size of the sample affects the statistical validity of one's conclusions, with a smaller sample being more troublesome than a larger sample, as Ms. Freetly herself acknowledges. [9] The non-comparability of the water company sample is acknowledged by

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[8] Direct Testimony of Janis Freetly, pp. 13, lines 203-204
[9] *Ibid.*, pp. 32, lines 528-530

her as well,[10] which she tries to compensate for by averaging her water sample results with a utility company sample.

Q. What other issues do you wish to discuss?

A. Ms. Freetly makes several comments regarding my Direct Testimony that I wish to rebut.

Q. Would it be fair to conclude, as Ms. Freetly does, that your sample is not representative of the risk inherent in SBWGE's gas and water operations?

A. No, it would not. Ms. Freetly willingly acknowledges that WPL is the sole source of capital for SBWGE.[11] WPL competes for capital with more than gas companies, water companies or even utility companies. The fact is that WPL competes with all other companies of comparable risk for the capital it needs. The competition is not limited to other utilities, or to the gas or water sub-sets of the utility sector. Rather, there is competition among all other companies of comparable risk, such as the ones included in my sample group. The competition for capital is universal and continuous, whether or not detached observers choose to acknowledge that fact. My sample group was selected to reflect comparable equity risk, which was why the Value Line safety rankings were applied first, and comparable credit ratings applied next. The sample size that resulted (23) allows for a

[10] *Ibid.*, pp. 33-34, lines 543-556

higher degree of statistical significance and more reliable conclusions. Ms. Freetly's sample size was smaller and more constrained, as discussed earlier in this Testimony, leading to lower statistical significance and less reliable conclusions.

Q. Would it be fair to conclude, as Ms. Freetly does, that comparable earnings do not provide valid estimates of the investor-required rate of return?

A. No, it would not. Ms. Freetly discards the use of accounting-based book value in favor of the use of market-driven capitalization value, disregarding the fact that the authorized return on capital will be calculated and established on accounting-based book value, which in turns determines the cash flow investors are estimating for their valuations. Furthermore, it disregards the benchmarking that analysts and investors resort to in forming their expectations and judgments on under- and over-valuation; the benchmarking is based on accounting records. I might add that book values are not immune to market forces, as suggested by Ms. Freetly,[12] since they are subject to periodic mechanisms that test whether book values have been impaired.

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[11] Direct Testimony of Janis Freetly, pp. 4, line 49
[12] Direct Testimony of Janis Freetly, pp. 40, lines 673-674

Q. Would it be fair to conclude, as Ms. Freetly does, that historical risk premiums are not reasonable estimates of current investor-required risk premiums?

A. No, it would not. When the statistical series extends to a long enough period of time, the data will include a number of business cycles and major exogenous events (such as armed conflicts) of varying durations and intensities. As a result, one would obtain a more normalized sense of what an investor can expect risk premiums to be over an indefinite future period. It serves as a better and more reliable guide, and most investors (including those who actually supply WPL capital) take note for that very reason. Investor expectations are conditioned by historical reference points and parameters, and lessons are continuously drawn from our collective experience by analysts and portfolio managers alike. Ms. Freetly's decision flatly to disregard historical reference points deprive her of the ability to discern whether her estimates are exceptional or not, and therefore whether her recommendations based on those narrowly-based estimates are reasonable or not.

Q. Would it be fair to conclude, as Ms. Freetly does, that your CAPM analysis contains an unwarranted leverage adjustment?

A. No, it would not. Comparisons need to be made on an apples-to-apples basis, and this analysis is no exception to that rule. The sample companies have different capital structures and degrees of leverage, which affects each company's financial risk profile. In order to compare beta values across this financially heterogeneous sample, we needed to make an adjustment that would make the sample companies' leverage homogeneous. The result of the adjustment is a set of beta values that are comparable to WPL's (and therefore SBWGE's) leverage, on an apples-to-apples basis.

Q. Would it be fair to conclude, as Ms. Freetly does, that your DCF analysis contains an unreasonable terminal growth rate?

A. No, it would not. The object of looking at a longer time period (in this case, 1970-2002) is to establish a realistic level of assumed GDP growth for the second stage, which extends from the sixth year into perpetuity. There is more confidence and comfort in using a known and measurable rate of growth than there is in relying on estimates that are more colored by the recent past and the issues of the day.

Q. How do you react to the Commission precedents cited by Ms. Freetly?

A. I trust the Commission will give due consideration to the facts particular to this rate case, and consider all the arguments fairly and freely on their own merits.

Q. Does this conclude your pre-filed rebuttal testimony?

A. Yes.